

REMARKS

Claims 1-46 are pending and have all been rejected. By this amendment, Applicant is amending claims 1, 13, 27, 40, 41, 42, 43, and 44. In view of the foregoing amendments and the following remarks, Applicant respectfully requests that the Examiner reconsider the Application.

Rejections under 35 U.S.C. §112

In Paragraph 1 of the Office Action, the Examiner rejected Claim 1 under 35 U.S.C. §112, second paragraph. Applicant is amending Claims 1, 13, 27 and 40-44 to reference "a network device control software program." This revision to these claims will elucidate the subject matter in the context of the invention.

In Paragraph 2 of the Office Action, the Examiner objected to Claim 1 because the phrase "enable the remote client" was repeated. The superfluous phrase is deleted accordingly.

Rejections under 35 U.S.C. §103 (a)

In paragraph 4 of the Office Action, the Examiner rejected claims 1-46 under 35 U.S.C. §103(a) as unpatentable over U.S. patent No. 5,887,139 to *Madison, et al.* in view of U.S. patent No. 5,812,529 to *Czarnik, et al.*

The problem addressed by the present invention is the difficulty of managing and configuring a network device from a remote client where the remote client does not have the supporting software necessary to manage and configure the network device. *Madison* provides one solution to this problem by disclosing a graphical user interface application that is downloaded from a server to a remote client. In contrast, the present invention solves this problem by providing a system and method for manufacturing and using a network device capable of providing the needed management and configuration software to a remote user, as an alternative to using a server. Claim 1 recites a network device that

is manufactured by "loading the binary file with the embedded downloadable unit onto the *network device*" (emphasis added). (1)

Madison teaches downloading a resource application from the server. However, for this method to be effective, the server must contain a long list of executable code required to manage, configure and control all network devices, as well as any and all associated periodic updates and revisions to that code. On the other hand, the Applicant's invention provides more than a mere graphical user interface downloaded from server to client. Using the claimed invention, it is not necessary to have a server with a vast library of configuration files and drivers. The network device itself is manufactured with the appropriate binary control software installed with the device-specific downloadable units embedded therein. These downloadable units are the heart of the present invention. The downloadable units provide greater functionality, utility and comprehensive support of network devices than the user interface application 32 and the resource application 46 that are downloaded from the server in *Madison*.

The downloadable unit of the present invention is described in independent claims 1, 13, 27, 43 and 44 as comprising

"a communicator component for establishing a communications channel between the remote client and the software program, an interface component for enabling a user to communicate with the downloadable unit, and a configuration component for managing and configuring the remote device or the software program."

In the Office Action, the Examiner equated the aforementioned communicator component with *Madison's* user interface application 32; the interface component to *Madison's* Web browser 30; and the configuration component to *Madison's* process of executing the application program 46. Applicant respectfully traverses. The presence of these three components in the downloadable unit of the present invention is unlike anything disclosed or suggested in *Madison*. (2)

First, the communications component of the downloadable unit provides a channel of communication between the client and the network device control software program, not a "user interface application 32 programmed in Java computer language" as

cited by the Examiner in *Madison*. Second, the configuration component of the downloadable unit provides the executable code that controls, manages and configures the specific network device from which the downloadable unit is obtained. This component comprises the configuration and management portion of the downloadable unit, not the process of downloading and executing an application as given in the cited passages in *Madison*.

In the present invention, taken as a whole, the fundamental feature of the downloadable unit is the bundle of components, embedded in the control software of the network device, that allow a remote user to control the network device software. In essence, the downloadable unit transforms a network device into a "smart" device, offering remote configuration and management capability from any node on the network in a manner that is neither disclosed nor contemplated by *Madison*. For the aforementioned reasons, Applicant respectfully submits that the *Madison* reference neither teaches nor suggests such a downloadable unit. Accordingly, Applicant respectfully requests withdrawal of this rejection of Claim 1.

The Examiner concedes that *Madison* does not expressly teach "compiling the software program into a binary file" and "embedding the downloadable unit into the binary file." Even if, as the Examiner contended, one skilled in the art could have been motivated to modify *Madison* in view of *Czarnik*: (1) "to be able to transmit configuration files (binary) over the network interface to remote clients", and (2) "to be able to transmit embedded software links (embedded downloadable units) such as Java Applets for configuration and monitoring of network devices from the client machine," Applicant respectfully submits that neither of these points addresses the nature of the claimed invention. Claim 1 of the present invention describes a method for manufacturing a network device that includes the compilation of a software program in a binary format so that a downloadable unit may be embedded into it. Neither *Madison* nor *Czarnik* addresses this. Although *Madison* and *Czarnik* disclose the transmission and

downloading of files from a server over a network, they do not disclose steps involving compilation of the software and embedding of configuration files so that a network device can be manufactured with downloadable units pre-installed and available for download by a client. The fact that the downloadable unit is transmitted from the device to the client by way of a network is inconsequential. *Czarnik*'s cited passages do not teach or make obvious that *Madison*'s user interface application 32 may be compiled into a binary format, that the resource application 46 may be embedded into the binary file, or that the compiled software may be installed on a network device. (4)

The Examiner also equated the claimed invention's "loading the binary file with the embedded downloadable unit onto the network device" to *Czarnik*'s server providing "mission choices through Java applets which provide the software necessary to define and select a mission" (Col. 6, lines 44-56). Applicant respectfully traverses. Using *Czarnik*, the user's "mission choices" are limited to those that actually reside on the mission server at the time the client looks up the URL for the server. In contrast, this is not a limitation of the claimed invention because the binary file with the embedded downloadable unit resides on the network device itself. As articulated above, Claim 1 is a method claim for the manufacture of network devices, and devices manufactured in accordance with this method will always comprise the required software and device-specific downloadable unit needed to control and configure the network device. *Czarnik* therefore does not disclose or make obvious a binary file with an embedded device-specific program within the binary file that is preloaded onto a network device. (21)

Based on the discussion above, Applicant submits that Claim 1 is distinguishable from both *Madison* and *Czarnik*, taken either alone or in combination, and requests the allowance of the claim.

In paragraphs 5-15 the Examiner rejected Claims 2-12, respectively. Because Claims 2-12 depend either directly or indirectly from amended Claim 1, these claims are

allowable for at least the reasons discussed above with respect to Claim 1. Withdrawal of these rejections is, therefore, respectfully requested.

In paragraph 16, the Examiner rejected Claim 13 as unpatentable over *Madison*. The passage from *Madison* cited by the Examiner discloses a method of either connecting or isolating a personal computer from a device management window. Applicant respectfully submits that this passage is irrelevant to the nature of Claim 13. As stated above, the problem addressed by the present invention is the difficulty of managing and configuring a network device from a remote client where the remote client does not have the supporting software necessary to manage and configure the network device. Claim 13 addresses this problem by disclosing a system for managing a network device that utilizes a downloadable unit embedded into the device control software that is stored in the network device, allowing a client to have access and control over the required software and device-specific downloadable unit needed to control and configure the device. The cited passage of *Madison* does not address a binary file stored in a network device. Furthermore, the Examiner cited further limitations of Claim 13 based on the same grounds as Claim 1. As discussed above, because Claim 1 is distinguishable from both *Madison* and *Czarnik* and is now allowable, Claim 13 is likewise allowable for at least the reasons discussed above with respect to Claim 1.

The Examiner rejected Claims 15-17 based on Claim 13. Because dependent Claims 15-17 depend either directly or indirectly from Claim 13, these claims are allowable for at least the reasons that Claim 13 is allowable. The Examiner also rejected Claims 14, 18, 19, 20, 21 and 22 based on the rejection of Claims 10, 5, 6, 7, 9 and 10, respectively. Because dependent Claims 5, 6, 7, 9 and 10 depend either directly or indirectly from Claim 1, these claims are allowable for at least the reasons that Claim 1 is allowable.

In paragraphs 17-19 (first reference), the Examiner rejected Claims 23-26. Because Claims 23-26 are dependent on Claim 13, these claims are allowable for at least the reasons set forth for Claim 13.

In paragraph 19 (first reference), the Examiner rejected Claim 27 based on Claim 1. For the reasons discussed above, Claim 1 is patentably distinguishable over the *Madison* and the *Czarnik* references and is allowable. Therefore, Claim 27 is allowable for at least the reasons discussed above with respect to Claim 1. The Examiner rejected Claims 28-33 based on Claims 2-5, 9 and 10, respectively. (Claim 32 was rejected twice for identical reasons). Because dependent Claims 2-5, 9 and 10 depend either directly or indirectly from Claim 1, Claims 28-33 are allowable for at least the reasons that Claims 2-5, 9 and 10 are allowable.

In paragraph 18 (second reference), the Examiner rejected Claims 34 and 37 based on the rejection of Claim 27. For the reasons discussed above, Claim 27 is patentably distinguishable over the *Madison* and *Czarnik* references and is allowable. Therefore, Claims 34 and 37 are allowable for at least the reasons discussed above with respect to Claim 27. Furthermore, the Examiner rejected Claims 35 and 36 based on the rejections of Claim 24 and 23, respectively. Because Claims 24 and 23 are dependent on Claim 13 and are therefore allowable for at least the reasons as Claim 13, Claims 35 and 36 are allowable for at least the reasons set forth above for Claims 24 and 23.

In paragraph 19 (second reference), the Examiner rejected Claim 38. Because dependent Claim 38 depends directly from Claim 27, this claim is allowable for at least the reasons that Claim 27 is allowable.

In paragraph 20 the Examiner rejected Claim 39. Because dependent Claim 39 depends directly from Claim 27, this claim is allowable for at least the reasons that Claim 27 is allowable.

In paragraph 21, the Examiner rejected Claim 40 as being obvious over the *Madison* and *Czarnik* references. *Madison's* cited passage that

[a]fter receiving the resource information web browser 30 then requests the code for a user interface application 32, and web server 44 accesses the code stored on its local disk and sends it to web browser 30

does not teach or make obvious that *Madison's* resource application 46 is embedded in the binary code of interface application 32. Claim 40 recites "locating a downloadable unit . . . [that] is embedded in the binary file." As discussed above, because neither *Madison* nor *Czarnik* teaches a downloadable unit embedded in a binary file, these references cannot make obvious "extracting the downloadable unit from the binary file."

Further, neither *Madison* nor *Czarnik* teaches or suggests locating a downloadable unit, which corresponds to a request to manage software. Rather, the *Madison* method transmits an HTML file to the client in response to a request to manage or configure a network device. The *Czarnik* reference transmits certain data to "sentries" in response to a request to manage or configure a network device. Hence, neither of these references, or their combination, renders obvious the invention of Claim 40. Withdrawal of this rejection is, therefore, respectfully requested.

Moreover, the Examiner rejected Claims 41 and 42 based on the rejection of Claim 40. Applicant respectfully submits that these claims are patentably distinguishable over the art of record for the reasons discussed above in connection with Claim 40.

The Examiner rejected Claim 43 based on the same grounds as Claim 1 above. Consequently, Applicant respectfully submits that claim 43 is allowable for similar reasons as Claim 1, discussed above.

In paragraph 22, the Examiner rejected Claim 44, which was amended to recite similar limitations as Claim 43 concerning the downloadable unit. These limitations are similar to those added above in Claims 1 and 43; therefore Claim 44 is allowable for reasons similar to those for Claims 1 and 43. Withdrawal of this rejection is respectfully requested.

In paragraph 23 the Examiner rejected Claim 45. Claim 45 depends from claim 13 directly and therefore is allowable for at least the reasons claim 13 is allowable.

In paragraph 24 the Examiner rejected Claim 46. Claim 46 depends indirectly from claim 13 and directly from Claim 45 and therefore is allowable for at least the reasons Claims 13 and 45 are allowable.

SUMMARY

In conclusion, Applicant respectfully submits that pending claims 1-46 present subject matter that is patentable over the prior art of record and therefore requests that the Examiner withdraw the rejections of the pending claims and pass the application to issue. If the Examiner has questions regarding this case, the Examiner is invited to contact Applicant's undersigned attorney.

Respectfully submitted,

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